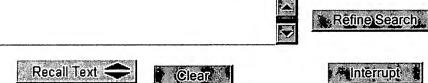
# Refine Search

#### Search Results -

Terms	Documents
pluronic same (vesicle or liposome) same enzyme	1

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:



## **Search History**

DATE: Monday, July 31, 2006 Printable Copy Create Case

Set Nam side by sid		Hit Count Set Name result set		
DB=U				
<u>L24</u>	pluronic same (vesicle or liposome) same enzyme	1	<u>L24</u>	
<u>L23</u>	laundry same (vesicle or liposome)	4	<u>L23</u>	
<u>L22</u>	cleaning same (liposome or vesicle) same enzyme	3	<u>L22</u>	
<u>L21</u>	cleaning same (liposome or vesicle) same pluronic	0	<u>L21</u>	
<u>L20</u>	L19 and vesicle	0	<u>L20</u>	
<u>L19</u>	L18 and enzyme	6	<u>L19</u>	
<u>L18</u>	pluronic same (laundry adj3 detergent)	7	<u>L18</u>	
<u>L17</u>	pluronic same vesicle same enzyme	0	<u>L17</u>	
<u>L16</u>	L15 and enzyme	100	<u>L16</u>	
<u>L15</u>	pluronic same vesicle	134	<u>L15</u>	
<u>L14</u>	L13	0	<u>L14</u>	
<u>L13</u>	pluronic same vesicle same (laundry adj1 detergent)	0	<u>L13</u>	
<u>L12</u>	L11 and vesicle	0	<u>L12</u>	
<u>L11</u>	L10 and enzyme	5	<u>L11</u>	

<u>L10</u>	(\$block adj1 polymer) same (laundry)	7	<u>L10</u>
<u>L9</u>	12 and detergent	32	<u>L9</u>
<u>L8</u>	laundry	34459	<u>L8</u>
<u>L7</u>	L2 and laundry	0	<u>L7</u>
<u>L6</u>	L1 and laundry	0	<u>L6</u>
<u>L5</u>	L3 and (enzyme)	32	<u>L5</u>
<u>L4</u>	L3 and (protein or enzyme)	36	<u>L4</u>
<u>L3</u>	L2 and (ethylene or ethylethylene or acryl\$ or vinylamine)	36	<u>L3</u>
<u>L2</u>	(\$block adj1 polymer) same (vesicle or liposome)	89	<u>L2</u>
L1	(\$block adj1 polymer) adj10 vesicle	3	<u>L1</u>

# END OF SEARCH HISTORY

First Hit Fwd Refs

Previous Doc Next Doc Go to Doc#

Generate Collection Print.

L18: Entry 3 of 7

File: USPT

Nov 13, 1984

US-PAT-NO: 4482630

DOCUMENT-IDENTIFIER: US 4482630 A

TITLE: Siliconate-coated enzyme

DATE-ISSUED: November 13, 1984

INVENTOR-INFORMATION:

STATE ZIP CODE COUNTRY NAME CITY

Allen; Edwin BEOupeye ΒE Dillarstone; Alan Rocourt Reul; Joseph A. ΒE Heusy

US-CL-CURRENT: 510/530; 252/384, 252/385, 435/183, 435/187, 435/188

#### CLAIMS:

What is claimed is:

- 1. Particles of enzyme of sizes in the range of No's. 10 to 200, U.S. Sieve Series, at least partially coated with a salt of a lower alkyl siliconic acid and/or polymerization product(s) thereof formed therefrom on storage.
- 2. Enzyme particles according to claim 1 which are coated with from 0.05 to 1% of potassium methyl siliconate.

Go to Doc# Previous Doc Next Doc

First Hit Fwd Refs

Previous Doc Next Doc Go to Doc#

Generate Collection Print

L19: Entry 1 of 6

File: USPT

Jul 16, 1996

DOCUMENT-IDENTIFIER: US 5536440 A

TITLE: Stable, aqueous concentrated liquid detergent compositions containing hydrophilic copolymers

#### Brief Summary Text (49):

The detergent active matter may be selected from the group of anionic, nonionic, cationic, amphoteric and zwitterionic surfactants known to the skilled artisan. Examples of these surfactants may be found in McCutcheon, Detergents and Emulsifiers 1993, incorporated herein by reference. Examples of nonionic surfactants will include commonly utilized nonionic surfactants which are either linear or branched and have an HLB of from about 6 to 18, preferably from about 10 to 14. Examples of such nonionic detergents are alkylphenol oxyalkylates (preferably oxyethylates) and alcohol oxyethylates. Examples of the alkylphenol oxyalkylates include C.sub.6 -C.sub.18 alkylphenols with about 1-15 moles of ethylene oxide or propylene oxide or mixtures of both. Examples of alcohol oxyalkylates include C.sub.6 -C.sub.18 alcohols with about 1-15 moles of ethylene oxide or propylene oxide or mixtures of both. Some of these types of nonionic surfactants are available from BASF Corp. under the trademark PLURAFAC. Other types of nonionic surfactants are available from Shell under the trademark NEODOL. In particular, a C.sub.12 -C.sub.15 alcohol with an average of 7 moles of ethylene oxide under the trademark NEODOL.RTM. 25-7 is especially useful in preparing the laundry detergent compositions useful in the invention. Other examples of nonionic surfactants include products made by condensation of ethylene oxide and propylene oxide with ethylene diamine (BASF, TETRONIC.RTM. and TETRONIC.RTM. R). Also included are condensation products of ethylene oxide and propylene oxide with ethylene glycol and propylene glycol (BASF, PLURONIC .RTM. and PLURONIC.RTM. R). Other nonionic surface active agents also include alkylpolyglycosides, long chain aliphatic tertiary amine oxides and phosphine oxides.

#### Brief Summary Text (55):

The laundry detergent formulations heretofore described may also contain additional ingredients such as enzymes, anti-redeposition agents, optical brighteners, as well as dyes and perfumes known to those skilled in the art. Other optional ingredients may include fabric softeners, foam suppressants, and oxygen or chlorine releasing bleaching agents.

#### Detailed Description Text (7):

Lipolase, Savinase and Termamyl are laundry enzymes -- Novo Nodisk BioIndustrials, Inc., Danbury, Conn.

> Previous Doc Next Doc Go to Doc#

## **Hit List**

# First Hit Clear Cenerate Collection Print Fwd Refs Bkwd Refs Generate OACS

### **Search Results** - Record(s) 1 through 6 of 6 returned.

☐ 1. Document ID: US 5536440 A

L19: Entry 1 of 6

File: USPT

Jul 16, 1996

US-PAT-NO: 5536440

DOCUMENT-IDENTIFIER: US 5536440 A

TITLE: Stable, aqueous concentrated liquid detergent compositions containing

hydrophilic copolymers

DATE-ISSUED: July 16, 1996

INVENTOR-INFORMATION:

ZIP CODE COUNTRY NAME CITY STATE Woodhaven MI Gopalkrishnan; Sridhar Allen Park Sherman; John V. ΜI Guiney; Kathleen M. Wyandotte ΜI Durocher; David T. Westland ΜI Welch; Michael C. Woodhaven MI

US-CL-CURRENT: 510/417; 510/321, 510/337, 510/340, 510/393, 510/418, 510/424, 510/434, 510/476

Full	Title	Citation	Front	Review	Classification	Date	Reference	ža	B SEMANOR W	Claims	10MC	Drawe D

☐ 2. Document ID: US 4482630 A

L19: Entry 2 of 6

File: USPT

Nov 13, 1984

US-PAT-NO: 4482630

DOCUMENT-IDENTIFIER: US 4482630 A

TITLE: Siliconate-coated enzyme

DATE-ISSUED: November 13, 1984

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Allen; Edwin Oupeye BE
Dillarstone; Alan Rocourt BE
Reul; Joseph A. Heusy BE

Record List Display Page 2 of 4

US-CL-CURRENT: 510/530; 252/384, 252/385, 435/183, 435/187, 435/188

Full Title Citation Front Review Classification Date Reference

☐ 3. Document ID: US 4482477 A

L19: Entry 3 of 6

File: USPT

Nov 13, 1984

US-PAT-NO: 4482477

DOCUMENT-IDENTIFIER: US 4482477 A

TITLE: Particulate detergent containing siliconate, composition and method for

manufacture thereof

DATE-ISSUED: November 13, 1984

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Allen; Edwin Oupeye BE
Dillarstone; Alan Rocourt BE
Reul; Joseph A. Heusy BE

US-CL-CURRENT: 510/347; 252/383, 252/385, 510/306, 510/322, 510/324, 510/351,

<u>510/441</u>, <u>510/442</u>, <u>510/466</u>

Full | Title | Citation | Front | Review | Classification | Date | Reference | White | Williams | Claims | KMC | Draw. De

☐ 4. Document ID: US 4482471 A

L19: Entry 4 of 6

File: USPT

Nov 13, 1984

US-PAT-NO: 4482471

DOCUMENT-IDENTIFIER: US 4482471 A

TITLE: Siliconate-coated sodium perborate

DATE-ISSUED: November 13, 1984

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Allen; Edwin Oupeye BE
Dillarstone; Alan Rocourt BE
Reul; Joseph A. Heusy BE

US-CL-CURRENT: 252/186.31; 252/383, 252/385

Full Title Citation Front Review Classification Date Reference Communication Claims RMC Crawd Communication

☐ 5. Document ID: US 4421657 A

L19: Entry 5 of 6

File: USPT

Dec 20, 1983

US-PAT-NO: 4421657

DOCUMENT-IDENTIFIER: US 4421657 A

TITLE: Heavy duty laundry softening detergent composition and method for

manufacture thereof

DATE-ISSUED: December 20, 1983

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Allen; Edwin Oupeye BE
Dillarstone; Alan Rocourt BE
Reul; Joseph A. Heusy BE

US-CL-CURRENT: 510/306; 252/383, 252/385, 510/307, 510/308, 510/334, 510/441, 510/443, 510/466, 556/465

	Full	Title	Citation	Front	Review	Classification	Date	Reference		14 A 7 X 8 3	Claims	lome	Drawe De
-													
		6.	Docume	nt ID:	US 41	45183 A							
	L19:	Enti	ry 6 of	6			1	File: US	SPT		Mar	20,	1979

US-PAT-NO: 4145183

DOCUMENT-IDENTIFIER: US 4145183 A

TITLE: Method for the oxidative treatment of textiles with activated peroxygen

compounds

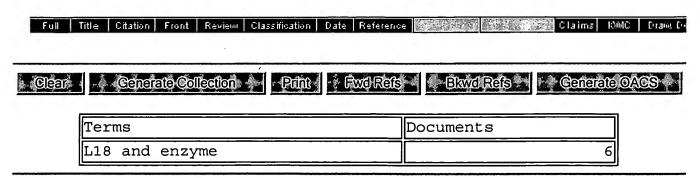
DATE-ISSUED: March 20, 1979

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Bostwick; Joseph H. Wilmington DE

US-CL-CURRENT: 8/111; 134/26, 134/28, 134/38, 134/39, 134/40, 252/186.38, 427/301, 427/322, 427/324, 510/303, 510/312, 510/338, 510/356, 510/413, 510/505



Display Format: - Change Format

Previous Page

Next Page

Go to Doc#